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ABSTRACT

The report presents an analysis of the size and composition of the school age handicapped population, the numbers and types of teachers providing education to them, the settings and accessibility of school facilities, and the levels of federal funding. The report notes the lack of available data on many national issues. Among major findings discussed are a growth of 15% in number of handicapped children receiving special education services from the 1976-77 to the 1982-83 school year; a dramatic growth in the number of children classified with learning disabilities; an increase of 31% in special education teachers from 1976-77 to 1981-82; the preponderance of integration in regular classes by speech impaired and learning disabled students; significant increases in school physical accessibility; an increase of 145% (adjusted for inflation) in federal grants for special education from 1977 to 1983; and higher proportions of males than females in classes for learning disabled students. (CL)

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The School-Age Handicapped

A Statistical Profile of Special Education
Students in Elementary and Secondary Schools
in the United States

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SUMMARY OF MAJOR FINDINGS

An analysis of aggregate statistical data that are collected by the U.S. Department of Education from state education agencies reveals the following national trends in the education of handicapped children in public elementary and secondary schools:

Size and Composition of the Special Education Student Population

- Between the 1976-77 school year and the 1982-83 school year, the number of handicapped children receiving special education services in U.S. public schools grew from 3.7 million to 4.3 million students, an increase of almost 600 thousand students, or 15 percent.

- As a percentage of total public school enrollment, the proportion of pupils receiving special education increased over this period from 8 percent to nearly 11 percent.

- Most of the increase was due to a dramatic growth in the number of children classified as having specific learning disabilities. The number of children receiving services for such conditions went from less than 800 thousand to more than 1.7 million, an increase of 119 percent.

- For most other handicapping conditions, such as the speech impaired, the mentally retarded, the hearing impaired, the orthopedically impaired, and the visually handicapped, there were declines in the number of children served in U.S. public schools over this time period.

- Because of these varying trends, the composition of the special education population changed dramatically. In 1976-77, the two largest categories of special education student were the speech impaired and the mentally retarded. By 1982-83, the learning disabled was the largest group, having grown from less than 22 percent to nearly 41 percent of the special education population.

Size and Composition of the Special Education Teaching Force

- Between the 1976-77 school year and the 1981-82 school year, the number of special education teachers employed in U.S. public schools grew from 179 thousand to 234 thousand, an increase of nearly 55 thousand teachers, or 31 percent.

- Like the composition of the special education student population, the makeup of the special education teacher force changed substantially. Teachers of the learning disabled, the emotionally disturbed, and the multihandicapped increased in number, while teachers allocated to most of the other handicapping conditions became fewer in number.

Integration of Handicapped Pupils Into Regular Schools and Classrooms

- During the six school years from 1976-77 to 1981-82, nearly 93 percent of the pupils who were classified as handicapped attended regular schools and more than two-thirds received the bulk of their instruction in regular classes.

- Most of the integration of handicapped pupils into regular classes took place in two categories of handicap: the speech impaired and the learning disabled. For pupils in other categories, there was little indication of a trend toward greater integration with non-handicapped pupils. Indeed, for mentally retarded pupils, the proportion taught in regular classrooms was actually smaller in 1981-82 (30 percent) than it had been in 1976-77 (38 percent), while the proportion taught in special classes was larger (57 percent in 1981-82, versus 51 percent in 1976-77).

Accessibility of Schools to Physically Handicapped Students

- The proportion of U.S. public schools with building entrances that are accessible to students in wheelchairs increased from 60 percent in 1978 to 73 percent in 1980. Significant increases also occurred over this period in the proportion of schools with accessible toilet stalls, science labs, and, to a lesser extent, classrooms.

Federal Funding of Special Education

- The annual total of federal grants to states and territories under Public Law 94-142 to help meet the cost of educating handicapped children grew from 252 million dollars in 1977 to just over one billion dollars in 1983. This represented an increase of over 300 percent in unadjusted dollars and 145 percent in dollars adjusted for inflation.

- In terms of constant (1983) dollars, the amount of federal spending per handicapped child went from $119 per child in 1977 to a peak of $299 per child in 1979. It declined to $241 per child in 1982, then increased to $251 per child in 1983.

Sex and Race Differences in Special Education Placements

- In civil rights surveys conducted in 1978 and 1980, more male than female pupils were found in special education programs for the learning disabled, the mentally retarded, the speech impaired, and the emotionally disturbed. The proportion of males in these classes ranged from 40 percent to more than 200 percent higher than the comparable proportion of females.

- In the 1978 and 1980 surveys, larger proportions of black than of white pupils were found in some special education programs. The proportion of blacks in programs for the mentally retarded was two-to-three times greater, and the proportion in programs for the emotionally disturbed greater by two-thirds to three-quarters. On the other hand, the proportion of black pupils in programs for the gifted was lower by 40-to-50 percent than the comparable proportion of white pupils.

- There was little change in sex and race differences between the two surveys.

Findings from Child-Based Surveys

An analysis of data on handicapped students from the National Survey of Children in 1977 and 1981 and other child-based surveys leads to the following conclusions:

- Changes between the late 1960s and the recent period show improved provision of special education resources to students whom teachers identify as needing such resources. National estimates from sample surveys of the proportion of handicapped children being served are usually lower than the proportion shown in state reports.

- There is more variability over time than commonly supposed in the identification of individual children as handicapped or in need of special resources. For example, among children identified in elementary school as in need of special help because they were retarded or learning disabled, only 39 percent were identified as needing the same resources five years later in junior high school or high school.

- Many parents of children identified by teachers as needing or receiving special educational resources seem unaware that their children are having problems in school. For example, among adolescents in a 1981 survey who were identified by teachers as needing special help for "slow learners or learning disabilities," only 57 percent were identified by their parents as having a limiting condition or getting special help in school.

- Teacher identification of students needing special education is associated with student socioeconomic status. For example, among 12- to 16-year-old students whose parents had not completed high school, teachers identified 24 percent as having a condition that limited their ability to do regular school work at grade level. By contrast, teachers identified only 4 percent of adolescents with college-graduate parents as limited.

- In terms of academic progress and overall adjustment to the school and classroom, adolescents with limiting conditions do significantly worse than non-limited adolescents. Adolescents limited with respect to physical activities do not seem to do as poorly as those with educational limitations. However, both groups show significant differences in performance and adjustment when compared with non-limited students.

- Despite their problems at school, a majority of adolescents with limiting conditions expect to get at least some college training. Their parents have similar expectations. The educational expectations of these students and parents are significantly lower, however, than those of their non-limited counterparts. In the 1981 survey, for example, 28 percent students with learning limitations expected to finish college, compared with 48 percent of those with physical limitations, and 61 percent of the non-limited students.

Note: Special education, as presented in the text that follows, refers to provisions for the handicapped and does not include programs for the gifted and talented. Resources for the gifted and advanced instruction are treated as separate from special education for the handicapped.

INTRODUCTION

It has been said that conditions at the edges of a society reveal more about the state and progress of the society than conditions in the middle. Handicapped children make up one group at the edge of U.S. society that has received a great deal of attention in the last decade. A series of landmark laws passed by Congress in the 1970s, culminating in the Education for All Handicapped Children Act of 1975, aimed to provide appropriate public education for all types of handicapped children, to extend the range and improve the quality of special education, and to integrate instruction for handicapped pupils into regular public schools wherever possible.

There has been much interest on the part of both the proponents and the critics of these reforms as to how federal laws and regulations have actually changed the character of schooling for children with special needs and for other children as well. Unfortunately, nationally representative data that could answer some of the most pressing concerns with respect to the education of handicapped children are largely not available. This report reviews much of the national data that are available with regard to trends in: the size and composition of the population that is receiving special education services; the numbers and types of teachers who are providing such education; the types of settings in which handicapped students are taught; the accessibility of school facilities to physically handicapped

children; the levels of federal funding being provided to states for special education programs; and the sex and racial/ethnic composition of the special education population.

In the second part of the report, data from several child-based national surveys are examined for what they tell us about: trends in the need for and use of special educational resources; constancy and change in the identification of individual students as handicapped; the degree of agreement between teachers and parents on the need for special education for specific children; variations on the need for and use of special resources across socioeconomic groups; and the academic performance, social adjustment, and educational aspirations of handicapped students.

DATA ON HANDICAPPED STUDENTS FROM STATE AND FEDERAL STATISTICS

Trends in the Number of Students Being Served

A major source of data on changes over time in the number of students receiving special education are the annual reports prepared by each state educational agency on the number of handicapped children aged 3 through 21 residing in the State who are receiving special education and related services. Unduplicated counts of the number of children served as of December 1st of each school year are required by two major Federal formula grant programs: Public Law 94-142, the Education for All Handicapped Children Act; and Public Law 89-313. The counts include all children served, whether by local school districts, intermediate units, or directly by the

State. State counts are compiled by the Office of Special Education and Rehabilitative Services of the U.S. Department of Education, which also prepares aggregate child counts for the nation as a whole.

As of the 1982-83 school year, nearly 4.3 million persons in the 50 States and the District of Columbia were reported to be receiving special education under the two programs mentioned above (Table 1). The national count of children receiving special education in 1982-83 was higher by about 57 thousand children, or 1.4 percent, than the comparable count in 1981-82. Between the 1976-77 school year, when the State counts were initiated, and 1982-83, the national total of handicapped children served increased by about 563 thousand children, or 15 percent. Over the same time span, the total number of children enrolled in public schools in the U.S., preprimary to 12th grade, declined by nearly 4.7 million, or about 10 percent. Thus, the proportion of children receiving special education, considered as a percentage of total public school enrollment, increased from about 8 percent in the 1976-77 school year to nearly 11 percent in 1982-83. Although the increase in the number of children receiving special education has been continuing through the early 1980's, the rate of increase from year to year has leveled off.

Trends for specific conditions. When the annual counts of persons in special education programs are broken down by type of handicapping condition, a more complex pattern of change over time emerges (1). For most conditions, the total number of students served has actually declined from year to year for

virtually every school year between 1976-77 and 1982-83. The number of students receiving services for the speech impaired, for example, declined from just over 1.3 million in 1976-77 to somewhat more than 1.1 million in 1982-83. This represented a drop of about 170 thousand students, or 13 percent. The number receiving special education for the hard of hearing and deaf declined from some 87 thousand to somewhat less than 73 thousand over the same time period, representing a loss of more than 14 thousand students, or 16 percent. The number of students receiving services for the mentally retarded went from some 959 thousand in 1976-77 to about 757 thousand in 1982-83: a drop of approximately 202 thousand students, or 21 percent. And the number receiving services for the orthopedically handicapped declined from nearly 87 thousand to less than 57 thousand, a drop of nearly 30 thousand students, or 34 percent. Declines have also occurred in the number of special education students who are classified as visually handicapped or "other health impaired." The latter category includes autistic children and those "having limited strength, vitality or alertness, due to chronic or acute health problems."

In contrast to the declining numbers of speech impaired, hearing impaired, mentally retarded, orthopedically handicapped, and visually handicapped students, the number receiving special instruction for specific learning disabilities has risen dramatically during the six-year period between 1976-77 and 1982-83. As defined in Federal Regulations, specific learning [illegible] "means a disorder in one or more of the basic psychological processes involved in understanding or using

language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain disfunction, dyslexia, and developmental aphasia" (U.S. Office of Special Education and Rehabilitative Services, 1982, page 786). The number of U.S. children receiving services for such conditions grew from less than 796 thousand in 1976-77 to more than 1.7 million in 1982-83: an increase of just over 945 thousand students, or 119 percent. The rate of increase from year to year in the number of students receiving services for learning disabilities has slowed in the most recent years. Nevertheless, there were still 118 thousand more students receiving such services in 1982-83 than in 1981-82, a one-year increase of more than 7 percent.

The number of students receiving special instruction for the "seriously emotionally disturbed" has also shown substantial growth over time, although not nearly as dramatic as that for specific learning disabilities. The number classified as seriously emotionally disturbed went from some 283 thousand in 1976-77 to slightly more than 352 thousand in 1982-83, an increase of nearly 70 thousand students, or not quite 25 percent. Between 1981-82 and 1982-83, the number of special education students in this category went up by nearly 13 thousand, for a one-year increase of just under 4 percent.

Still another pattern of change over time has been exhibited by students in the "multihandicapped" category (2). This classification is meant to apply to students having more

than one impairment (such as being both mentally retarded and blind), "the combination of which causes such severe educational problems that they cannot be accommodated in special education programs solely for one of the impairments" (U.S. Office of Special Education and Rehabilitative Services, 1982, page 785). The number of U.S. students reported in this category increased by 43 percent between 1978-79, the first year in which a count was taken of these children, and 1981-82. Between 1981-82 and 1982-83, on the other hand, the number showed a 12 percent decline, going from 71 thousand students to less than 63 thousand. It is apparent from inspection of trends in individual State counts, however, that the changes over time are so abrupt that they may well be due primarily to changes in administrative procedures and in classification practices of state educational agencies, rather than to changes in the number of multihandicapped students in the population.

The composition of the special education population changed notably in the six school years between 1976-77 and 1982-83 because of the varying trends described above. The two largest categories of special education student in 1976-77 were the speech impaired, who made up 35 percent of all special education students, and the mentally retarded, who comprised 26 percent of the total. By 1982-83, the learning disabled category was the single largest group reported, having grown from less than 22 percent of the special education population in 1976-77 to nearly 41 percent, while the speech impaired and mentally retarded had fallen to 27 percent and 18 percent respectively.

In 1982-83, nearly half of all special education students fell into the somewhat ambiguous categories of learning disabled and seriously emotionally disturbed. Another 44 percent were classified as speech impaired or mentally retarded. Less than 7 percent fell into the more obvious, "physical" disability categories, such as hard of hearing or deaf, orthopedically handicapped, visually handicapped, deaf-blind, chronic health impaired, or multihandicapped.

Reasons for the changes. A number of explanations have been offered by state and federal officials for the changes that have occurred in the size and composition of the special education population and, in particular, for the marked increase in the count of learning disabled children. The following factors were cited, for example, when the National Association of State Directors of Special Education (NASDSE, 1983) questioned some of its members about reasons for the growth of the learning disabilities category:

-- Greater public awareness of learning disabilities since the passage of the Education for All Handicapped Children Act, along with pressure by parents and others to insure that such children are adequately served, have resulted in the identification of children whose learning disabilities may previously have gone undetected.

-- The wider availability of assessment techniques for identifying students with specific learning disabilities has also served to increase the proportion of these students who are recognized and given special instruction.

-- Liberal eligibility criteria for learning disabilities in many states and localities allow children with a wide range of learning problems to be classified as learning disabled.

-- Cutbacks in other remedial programs have reduced the range of instructional options available for students with learning problems, resulting in some students being referred to special education programs, even though those programs may not be strictly appropriate.

-- The perception that the learning disabled classification is less stigmatizing than the mentally retarded classification has led to a tendency for students who once would have been categorized as mildly retarded or "slow learners" to be classified now as having specific learning disabilities.

-- In addition, some states are under court order to reevaluate minority students who have been labeled as retarded in the past. Many of these children are being reclassified as learning disabled.

The interviews with the state special education directors suggest that many states are concerned about the growth in the learning disabled category and are taking steps to tighten eligibility criteria and otherwise to limit further expansion of the category. As noted above, the nationwide increase in the numbers of learning disabled students does seem to be slowing down in recent years. The size of the increase from year to year went from 15 percent between 1979-80 and 1980-81, to 11 percent between 1980-81 and 1981-82, down to 7 percent between 1981-82 and 1982-83.

The increases in the numbers of children in both the seriously emotionally disturbed and multihandicapped categories have been attributed to intensified efforts in many states to identify and provide special services to previously unserved children. In addition, the assurance of a "free appropriate public education" for "all handicapped children" that Public Law 94-142 provides means that children with severe emotional disturbances or multiple physical handicaps can now receive through the public schools and the state educational agency services that were formerly available only in private schools or through programs administered by state agencies other than the state educational agency.

Despite the growth in the number of children officially classified as seriously emotionally disturbed, these children still represent less than one percent of total public school enrollment. Yet, as discussed in greater detail below, several national surveys have shown that when elementary or secondary school teachers in the U.S. are asked to evaluate individual students, the teachers consider more than twice as many children to be seriously emotionally disturbed as are receiving special services for such disturbances at a given point in time. Thus, as with the case of the learning disability category, the size of the emotionally disturbed group depends on where the cutoff lines are drawn; i.e., how intense and how long-lasting a child's disturbed behavior must be before the child becomes eligible for special help.

The National Association of State Directors of Special Education (NASDSE, 1983), in recent interviews with some of its

members, reported the following reasons for growth of the seriously emotionally disturbed category:

-- An increase in the number of children in the schools who have behavior problems and who are in need of special education and related services.

-- Changes in patterns of service delivery by non-educational agencies, including (1) the movement of children from public and private long-term residential care facilities to community-based systems, and (2) reductions on mental health and social services programs and a greater reliance on district special education programs.

-- Reductions in general education budgets have resulted in increased numbers of children being referred to special education services.

-- Increased availability of teachers and diagnostic personnel in the special education system to instruct children with emotional problems.

-- Improved special education techniques for the identification of seriously emotionally disturbed students, diagnoses, classroom management, and instruction.

-- Reclassification of children previously served under the learning disabled or mentally retarded categories and transfer of these students to programs for the seriously emotionally disturbed.

The declines in the numbers of students with speech impairments, mental retardation, hearing impairments, visual handicaps, orthopedic handicaps, and other chronic health impairments can be attributed in part to the overall decline in

the size of the school-aged population. Yet, as noted above, the reductions in size of these handicapped groups have all been proportionally larger than the reduction in total enrollment. In the case of the mentally retarded group, and especially of the orthopedically handicapped and chronic health impaired groups, the declines have been substantially greater than the overall drop in enrollment.

One possible explanation for the marked diminution of some handicapped categories is that state or local educational agencies have shifted some of the children who were previously classified in categories such as mentally retarded or health impaired into other categories, such as learning disabled, seriously emotionally disturbed, or multihandicapped. Some wholesale transfers of students from one category to another are known to have occurred. Between 1981-82 and 1982-83, for example, the State of New York apparently shifted approximately 25,000 students from the health impaired category to the learning disabled category. Moreover, in many states, as noted earlier, mildly handicapped students who once would have been classified as mentally retarded are increasingly classified as learning disabled. However, this explanation does not seem to account for all of the shrinkage that has occurred.

There are reasons to believe that there have been real reductions in the numbers of children with certain types of handicaps. Some environmental hazards that can cause impairments in children have been brought under at least partial control. For example, data from the second National Health and Nutrition Examination Survey indicate that average blood lead

levels in the United States dropped approximately 37 percent between 1976 and 1980 (Annest et al., 1983), probably as a result of the reduction in the lead content of gasoline during this period. The presence of lead in the blood and teeth of children, even in relatively low concentrations, has been shown to be associated with cognitive deficits and behavioral disorders (Needleman et al., 1979; Yule et al., 1981; David et al., 1982).

The wider availability of adequate prenatal care and nutrition to indigent families, and improvements in the postnatal care of premature infants and infants with respiratory distress, jaundice, and other birth complications, have also lowered the risk of handicap in childhood (Budetti et al., 1980; Shapiro et al., 1980). However, some public health specialists believe that the proportion of handicapped children in the population may actually be increasing because more infants of extremely low birth weight and/or with severe birth complications or defects are being kept alive by medical technology (see statements quoted in Lyons, 1983). There are trend data from the National Health Interview Survey that seem to substantiate this concern; these data indicate that the proportion of U.S. children who are reported to be limited in activity because of a chronic health condition increased from about 2 percent in the early 1960s to about 4 percent in the mid-1970s (Kovar, 1981, p. 43). As Kovar (1982) has pointed out, however, the increase is not greater in younger than in older children, as would be expected if the recent decline in infant mortality were producing an increase in childhood

morbidity. Moreover, as Kovar has also noted, a number of other factors could be responsible for the increase in reported activity limitation: increased parental awareness of childhood handicaps; better diagnosis through greater access to medical care; or decreased institutionalization of handicapped children. (The National Health Interview Survey covers only the non-institutionalized portion of the U.S. population.) Other studies have failed to find evidence that the decrease in infant mortality has been accompanied by an increase in the proportion of children with defects (e.g., Shapiro et al., 1983).

Obviously, the child counts collected by the Office of Special Education and Rehabilitative Services do not in themselves allow one to determine the extent to which observed changes reflect shifts in the characteristics of the underlying child population as opposed to changes in the ways states identify and classify handicapped students. It seems noteworthy, nonetheless, that the handicapped categories that have grown in size are predominantly those with relatively ambiguous definitions, whereas the categories that have remained constant or diminished in magnitude are predominantly those with relatively "hard" definitions. There are some limited survey-based data, discussed below, that shed further light on trends in the proportion of handicapped children in the population. Until more comprehensive, child-based statistics on handicapped children are collected on a regular basis, however, the full reasons for the observed changes in the child counts will remain obscure.

Trends In the Number Of Special Education Teachers

If a free appropriate public education is to be offered to all handicapped children, there must be adequate numbers of specially trained teachers available to provide the requisite instruction. The Office of Special Education and Rehabilitative Services compiles data from the States on the number of special education teachers employed annually, broken down by the type of handicapped students taught. The availability of these data lags a year behind the annual child count data, and reporting of special education personnel has not been as consistent or as complete as the reporting on the numbers of children served (3). Nevertheless, the teacher counts furnish at least a rough picture of how the employment of special education teachers has changed since 1976.

Like the number of children receiving special education services, the number of teachers providing those services around the United States has increased substantially since the passage of Public Law 94-142 (Table 2). State education agencies reported nearly 234 thousand special education teachers employed during the 1981-82 school year, up by almost 55 thousand or 31 percent, over the number reported for the 1976-77 school year. The increase may be somewhat overstated, as state reporting of special education personnel was less complete in the mid-1970's than it has since become. But it is nonetheless clear that a significant expansion of this part of the teaching force has occurred.

In recent years, the rate of growth in the total number of special education teachers has slackened considerably. Between 1980-81 and 1981-82, the total increased by little more than two thousand teachers, or only about one percent. Indeed, for most types of handicaps, the number of instructors employed actually decreased between these two years.

Within several specific categories of handicapped instruction, the number of teachers employed has been declining along with the number of students classified as having that type of handicap. For example, the number of teachers specially qualified to teach mentally retarded students peaked in the 1977-78 school year, and then started to decline so that there were almost 12 thousand fewer teachers of the retarded reported in 1981-82 than in 1977-78. For teachers of the hard of hearing or deaf, of the orthopedically handicapped, and of the visually impaired, the numbers peaked in the 1978-79 school year and have since dropped by between one thousand to twelve hundred teachers.

For speech teachers, on the other hand, the number employed continued to increase up through the 1980-81 school year, even though the number of students in the speech impaired category was declining. Between that year and 1981-82, however, the reported number of speech teachers dropped by nearly four thousand, although there was still a net gain of more than two thousand speech teachers between 1976-77 and 1981-82 (4).

In categories where the number of students has been increasing, namely, the learning disabled, emotionally disturbed, and multihandicapped, the numbers of teachers

employed have also increased. At least this was the case up until the 1980-81 school year. Between that year and the next, the number of teachers of the multihandicapped remained essentially the same, and the numbers in the learning disabled and emotionally disturbed categories decreased by about 13 hundred and 23 hundred, respectively. These declines are at least partly explained by the fact that, in 1981-82, for the first time, nearly 16 thousand special education teachers were not reported under a specific handicap category, but were listed as "non-categorical." These teachers are employed to provide instruction to more than one type of handicapped student, often in the preschool age group. (In the past, such teachers were often either omitted from the individual category counts or counted in more than one category. However, they usually appeared in unduplicated form in total teacher counts.) The number of teachers who appeared under this classification in 1981-82 more than offset the declines from the prior year in the learning disabled, speech impaired, mentally retarded, and emotionally disturbed categories combined.

As with the child counts, the national figures on special education teachers employed do not necessarily reflect trends in particular states. There are certainly some states, for example, where the numbers of special education teachers rose throughout the 1976-77 to 1981-82 period, even in handicapped categories where the national totals of students and teachers declined.

Pupil-teacher ratios. When the number of students receiving special education services in a given year is divided by the number of teachers providing those services, the resulting pupils-per-teacher ratio can serve as one crude index of the quality of instruction being furnished. Small class sizes are generally thought to be more desirable than large class sizes, at least in terms of making it feasible for the instructor to tailor the level of instruction to the needs of individual students, to monitor the progress of the students, and to provide personal encouragement or correction. The pupils per teacher ratio may not precisely represent the actual class sizes that handicapped students typically experience in a given year in a given school system, but variation in the index from year to year, from system to system, or from one type of handicap to another does tell us something about the relative amounts of individualized instruction that different groups of pupils are receiving.

The average pupils per teacher ratio for the U.S. as a whole and for all types of handicapping conditions combined has remained stable at approximately 18-to-1 over the last three years for which data are available. The index has shown substantial variation across handicapping conditions and more modest variation across time in individual conditions.

In terms of differences across specific conditions, by far the highest pupil-teacher ratios are those calculated for the speech impaired group. In 1981-82, the ratio for this group was equal to about 56 students per employed speech teacher. This reflects the fact that virtually all speech impaired students

spend less than 10 hours per week receiving special instruction for their speech problems. The rest of the time they receive regular instruction in regular classes. This means that a given speech teacher can work with a number of different groups of speech impaired pupils over the course of a week.

At the other extreme, the lowest pupil-teacher ratios are those observed for the relatively small group of deaf-blind pupils. In 1981-82, the ratio for this group was six pupils per employed special teacher. Obviously, children with this multiple handicap cannot readily benefit from standard modes of classroom teaching and require a great deal of individualized instruction in communication skills as well as specific academic subjects. Relatively low pupil-teacher ratios are also found for the hard of hearing and deaf group (9 pupils per employed teacher in 1981-82) and the visually impaired group (10:1 in 1981-82). The pupils in these groups are not all severely impaired: the majority can benefit from regular teaching and require only part-time specialized instruction. However, the total numbers of students in these groups are apparently too small to permit the economies of scale that are possible with the speech impaired group.

Other groups with smaller pupil-teacher ratios are the mentally retarded (12:1 in 1981-82); the orthopedically impaired (12:1); the multihandicapped (13:1); and the emotionally disturbed (14:1). Two groups with average or larger ratios are the learning disabled (19:1 in 1981-82) and the other health impaired (23:1 in the same year). Most of the pupils in the

latter groups can, like the speech impaired students, benefit from regular classroom instruction and require special help in some subjects or some circumstances only.

In terms of changes over time in the pupil-teacher ratios, the general pattern is one of decreasing ratios over the mid- to late-1970's, with no clear trend from 1980 to 1982. Some of the apparent improvement in the early years may be the result of more complete reporting by the States. And some of the apparent deterioration in the most recent year may be attributable to the advent of the "non-categorical" teachers, who cannot readily be allocated to particular handicapped groups. Overall, however, it would appear that the schools have managed to maintain pupil-teacher ratios at fairly constant levels despite changes in the composition of the handicapped student population and the special education teacher force.

Trends in Environmental Conditions

Public Law 94-142 mandates that handicapped children are to be educated with their non-handicapped peers to the maximum extent appropriate and that school districts are to offer a range of educational options for handicapped pupils. There has been a good deal of controversy over the wisdom of trying to integrate more severely handicapped students with cognitive problems into regular classrooms. It has been argued, for example, that, even if these severely handicapped children are present in the classroom on a daily basis, they would benefit more, educationally, from a specialized environment to meet their needs. Educating handicapped children in the least

restrictive environment may conflict with the provision of the most sophisticated equipment and services to the children. It is usually cheaper and easier to provide specialized apparatus and services in a centralized facility.

Whatever the merits of such arguments, the so-called "mainstreaming" controversy appears to be largely academic in most States. Child count data compiled by the U.S. Office of Special Education and Rehabilitative Services indicate that there has been little overall change in the kinds of environments in which handicapped children are taught (see Table 3). To be sure, the vast majority -- nearly 93 percent -- of the pupils who are classified as handicapped do attend regular public schools. More than two-thirds of all handicapped pupils also receive the bulk of their instruction in regular classes along with their non-handicapped age-mates. One quarter of all handicapped children attend regular schools but receive most of their instruction in separate classes. Children in the latter group are presumed to have some contact with non-handicapped children, at least during portions of the school day. About six percent of all handicapped children attend separate schools where all the other pupils have similar disabilities. About one percent receive instruction in other settings, such as tutoring at home or in hospitals.

These overall national proportions changed remarkably little over the six school years from 1976-77 through 1981-82. Longitudinal case studies in a number of different states and localities have also found little change in the types of environments in which handicapped students are taught, although

the studies do report some expansion in the range of placement options available to individual students (SRI International, 1982; U.S. Office of Special Education and Rehabilitative Services, 1983, page 16).

There is a great deal of variation across specific handicapping conditions in the extent to which children receive instruction in regular classrooms as opposed to special classes or special schools (see bottom half of Table 3). Within the two largest groups of handicapped children, the learning disabled and the speech impaired, large majorities of children receive the bulk of their instruction in regular classrooms and very few attend special schools. In 1981-82, 80 percent of learning disabled pupils and 94 percent of speech impaired pupils were reported to be receiving most of their education in the regular classroom setting.

The situation is quite different, however, for the third largest handicapped group, the mentally retarded. Only about 30 percent of mentally retarded children were reported to receive most of their instruction in regular classes in 1981-82. More than half -- 57 percent -- were being taught in segregated classes and 13 percent, in special schools or other environments.

For children in most of the other handicapped categories, the situation is more like that of the mentally retarded than that of the speech impaired or learning disabled. The only other group in which a majority of the children receive most of their instruction in regular classrooms is the visually handicapped. Even in this group, upwards of one in five

children attend special schools and nearly one in five more receive most of their instruction in special classes in regular schools. Groups that are most likely to be taught in special schools or other facilities are the deaf-blind (47 percent in special schools or other facilities in 1981-82), the multihandicapped (33 percent), and the orthopedically impaired (34 percent). When the emotionally disturbed, hearing impaired, and orthopedically impaired attend regular schools, they have virtually equal placements in regular and special classes.

There has been some variation across different handicapping conditions in the pattern of change over time. With the exception of the speech impaired, however, none of the groups has exhibited change in the direction of a greater proportion of pupils receiving instruction in regular classes. Indeed, for the mentally retarded -- the group that has received the most attention in connection with the controversy over "mainstreaming" -- the bulk of the change has been in the opposite direction. The proportion of mentally retarded children who receive most of their instruction in regular classrooms is smaller now (30 percent in 1981-82) than it was in the past (38 percent in 1976-77), while the proportion who are taught in special classes is larger (57 percent in 1981-82, versus 51 percent in 1976-77) (U.S. Office of Special Education and Rehabilitative Services, 1983, p. 13).

The change in the distribution of mentally retarded pupils across instructional environments may be at least partially explained by changes in the composition of the mentally retarded population. As noted earlier, mildly

handicapped students who were once classified as mentally retarded and taught in regular classes may no longer be so classified. In addition, public schools are now responsible for the education of severely retarded pupils, many of whom were previously educated in private institutions or cared for in programs administered by state health or mental health agencies.

Although the nationwide child counts described above reveal no major movement toward increasing the proportion of handicapped pupils who are taught in regular classes, there do seem to be individual states where the "least restrictive environment" principle has been applied more extensively. For example, in recent years the states of Arkansas, Georgia, Kentucky, Mississippi, Nebraska, North Carolina, South Carolina, Tennessee, Vermont, and West Virginia have reported that a majority of their mentally retarded pupils were receiving most of their instruction in regular classes. On the other hand, in populous states such as California, Florida, New Jersey, New York, and Pennsylvania, the proportion of retarded students receiving instruction in regular classes has been 10 percent or less (U.S. Office of Special Education and Rehabilitative Services, 1983, Table E, page 144).

The accessibility of school buildings. Another point of concern with respect to the education of handicapped children is the extent to which school buildings and their interior facilities are accessible to students with orthopedic handicaps or other impairments that restrict mobility. The goal of making all schools accessible to students in wheelchairs as rapidly as possible has generated intense debate, principally because of

the expense of making major structural alterations in existing school buildings. Unlike the goal of integrating handicapped children into regular classrooms, however, the goal of making schools accessible to crippled children does seem closer at hand than it was in the mid-1970's. The data that are available on this question indicate that significant progress has been made, at least as far as the data go, which at present is only to 1980.

The major sources of national trend data on the accessibility of schools to handicapped students are the Elementary and Secondary Schools Civil Rights Surveys conducted by the Office for Civil Rights of the U.S. Department of Education in the Fall of 1978 and the Fall of 1980. These surveys obtained information required by the Office for Civil Rights to fulfill its responsibilities under Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973. The 1978 survey forms were administered to a sample of approximately 6,000 of the 11,500 school districts in the U.S. with enrollments of at least 300 students, and to approximately 54,000 individual schools within those districts. The 1980 survey forms were administered to approximately 5,000 school districts and 51,000 individual schools. (A similar survey was conducted in the Fall of 1982 but did not include questions about the accessibility of school buildings. It is not clear whether future waves of the Civil Rights Survey will collect such information.)

The survey data that are available (Office for Civil Rights, 1980, 1982) show substantial increases between 1978 and 1980 in the proportion of U.S. schools with accessible building entrances (see Table 4). This proportion went from 60 percent in the earlier survey to 73 percent in the later survey. The fraction of schools with accessible toilet stalls was lower on both occasions, as was the proportion with accessible science laboratories. (Not all schools have science laboratories, of course; in 1978, accessible science labs were reported in 51 percent of schools having science labs.) But these proportions also showed significant improvement between the two surveys. The proportion of classrooms that were accessible by wheelchair went up as well, although not as sharply: from 59 percent in 1978 to 65 percent in 1980.

These figures are based on reports by principals and school administrators, rather than on direct evaluation by trained observers. In addition, the charting of progress (or lack of progress) beyond the levels attained in 1980 must await future, and as yet unscheduled, data collection efforts.

Trends in Federal Funding of Education for the Handicapped

The amount of money that the federal government provides each year to state and local education agencies to help meet the costs of educating handicapped children has grown considerably since the passage of Public Law 94-142 in 1975. The growth has been due partly to the increase in the number of children who are receiving special education services and partly to increases

in the amounts Congress has appropriated per handicapped child. The annual total of federal grants to states and territories under Public Law 94-142 has grown from $252 million dollars in 1977 to just over one billion dollars in 1983 (see Table 5). This is the major formula grant program for the education of the handicapped, but by no means the only one. Other federal programs provide lesser amounts of money for special educational services in state-operated institutions and programs; for preschool and Head Start programs for handicapped children; for vocational education; and for the improvement of local education agency programs for handicapped children. Together, these grant programs totaled well over a billion dollars in 1983.

Federal grants for handicapped education may seem to involve sizable sums of money, but they amount to only a small fraction of the costs that states and local school districts incur in order to provide the special education and related services that are mandated by federal law. The one billion dollars granted to states and territories under Public Law 94-142 in 1983 came to some $251 per handicapped child. Based on a Rand Corporation study (Kakalik, Furry, Thomas, and Carney, 1981), the Office of Special Education has estimated that the average annual cost of educating a handicapped child in the U.S. comes to more than $5,100 (and this estimate is as of the 1980-81 school year). More than half of that amount represents "excess cost," that is, costs over and above those of a regular education for the pupil. Thus, the federal contribution comes to roughly one-tenth of the total excess cost of providing special education to the Nation's handicapped children. (Of

course, the actual costs of educating specific handicapped children vary widely depending on the nature and severity of the handicap and the location in which services are provided.)

The rate of growth in federal expenditures for handicapped education was much greater in the late 1970's than it has been in the early 1980's. Indeed, in terms of constant 1983 dollars, the annual total of federal grants under Public Law 94-142 reached a peak in 1979, then declined by $146 million over the next two years, then increased again, but only by about $57 million, between 1981 and 1983. The amount spent per handicapped child followed a similar pattern, peaking in 1979 at the equivalent of $299 per child (in 1983 dollars), declining to the equivalent of $241 per child in 1982, then recovering slightly to $251 per child in 1983.

The Question of Bias

As noted in the earlier discussion of the child count data, the criteria used by states and school districts in assigning pupils to programs for some kinds of handicapping conditions are not completely clear-cut and objective. Because an element of judgment by teachers, principals, and school administrators enters into these determinations, the question of bias arises. That is, are children from some demographic groups more likely than those from other groups to be labelled as retarded, or learning disabled, or speech impaired, or emotionally disturbed? And does such disproportionate placement

of pupils in programs for the handicapped reflect prejudice on the part of teachers and administrators rather than the real educational needs of the pupils?

Data are available from the Civil Rights Surveys of Elementary and Secondary Schools on the relative participation rates of boys and girls and of pupils from different racial and ethnic groups in various special education programs. The programs covered include not only those for handicapped pupils but those for gifted and talented students as well. The information is based on aggregate school-record data reported by local school administrators, rather than on any direct observation or independent audit by the Office for Civil Rights. The overall participation rates in specific special education programs found in the Civil Rights Surveys are also somewhat different from those based on data compiled by the Office of Special Education and Rehabilitative Services, although the trends over time in the two data programs are generally parallel. A number of possible reasons have been advanced for the discrepancies between the Office for Civil Rights data and the Office of Special Education data, such as differences in time frames and population coverage, but there has been no definitive resolution.

The surveys conducted by the Office for Civil Rights have consistently found that males and females are not placed in programs for the handicapped in equal proportions (see Table 6). More males than females are found in classes for the learning disabled, the mentally retarded, the speech impaired, and the emotionally disturbed. The proportion of males in these classes

ranges from 40 percent higher to more than 200 percent higher than the comparable proportion of females. On the other hand, somewhat fewer males than females are found in public school programs for gifted and talented students. There is little or no indication in the Civil Rights Survey data that the relative numbers of males and females in these programs changed significantly between 1978 and 1980, even though the overall proportion of children in some of the programs did change in the interval.

As far as racial differences are concerned, the Civil Rights Surveys have found that the proportions of black students in some types of handicapped programs are significantly higher than the comparable proportions of white students. Specifically, the proportion of black pupils in classes or training programs for the mentally retarded is two-to-three times higher than the proportion of white pupils in such classes and programs. The proportion of blacks in classes or schools for seriously emotionally disturbed students is higher by two-thirds to three-quarters than the comparable proportion of whites. By contrast, the proportion of blacks in programs for the gifted and talented is 40-to-50 percent lower than the proportion of whites in such classes.

As noted earlier, there are a number of state educational agencies that are under court order to reevaluate the placement of minority students in programs for the handicapped. This process is thought to have resulted in the reclassification of significant numbers of black pupils from the mentally retarded category to the learning disabled category. If

this has indeed occurred, there is not yet any evidence of it in the 1978 and 1980 Civil Rights Surveys. Black-white differences in the proportion of pupils taking part in programs for the mentally retarded did not become any narrower between the two surveys. Nor did the other racial differences noted above. The proportion of black pupils participating in programs for the learning disabled did increase between the two surveys, but so did the proportion of white pupils, and by a like amount. On both occasions, the black proportion was not significantly different than the white proportion.

With regard to the placement of Hispanic pupils in special education programs, the Civil Rights Surveys have not found that the proportions of Hispanics in programs for the learning disabled, the retarded, the speech impaired or the emotionally disturbed are significantly higher than the equivalent proportions for non-Hispanic whites. However, the proportion of Hispanic pupils in gifted-and-talented programs is significantly lower than the proportion of non-Hispanic white pupils in these programs. The latter difference also holds true for pupils of American Indian background, only more so. American Indian children also seem to be placed in classes for the learning disabled in greater proportion than white children.

A very different picture has emerged for pupils of Asian-American background. The proportions of Asian pupils in classes for the learning disabled, the retarded, and the emotionally disturbed are all notably lower than the equivalent proportions of non-minority pupils. Conversely, the proportion

of Asian pupils in programs for the gifted and talented is notably higher than the proportion for white pupils or for the other minority groups.

The fact that significant differences are found between the sexes or between racial/ethnic groups in the proportion of students who receive certain types of special education is often taken as prima facie evidence of bias. This may or may not be the case. It is possible that there are real differences between groups in the prevalence of some handicapping conditions (and of some exceptional talents as well). For example, emotional disturbances in children are sometimes linked to family disruption early in childhood. The fact that black children are more likely than white children to grow up in disrupted families, as well as to come from educationally and economically disadvantaged families, may mean that there really are proportionally more black than white children with serious emotional disorders.

The Civil Rights Surveys do not gather information that would help to elucidate the reasons for the over- or under-representation of some groups in special education classes. The surveys collect aggregate data on the sex and racial/ethnic composition of special education classes, rather than individual-level data concerning the placement of a random sample of pupils. Thus, the survey files lack any information, such as test scores or descriptions of diagnostic procedures, that would allow one to evaluate the appropriateness of the

placement procedures used in forming special education classes. Also lacking is any additional background information on the pupils in the special education classes other than their sex and racial/ethnic group membership. This makes it impossible to determine whether other factors that relate to ethnic group membership -- such as parent education levels, family income, or family structure -- are more strongly related to placement in special education programs than is ethnicity itself.

DATA ON HANDICAPPED STUDENTS FROM CHILD-BASED SURVEYS

It should already be apparent that official statistics on the education of handicapped children have several major limitations. These statistics lack any independent estimate of how many children require different kinds of special education or related services. The child counts compiled by the Office of Special Education and Rehabilitative Services show how many children are receiving (or supposedly receiving) special education, not how many children need such education. The surveys conducted by the Office for Civil Rights do collect information on how many children need special education in each of the schools and school districts surveyed. However, the source of the information is the same principal or administrator who reports on how many children are receiving special education in the school or district. On the basis of these reports, it would appear that fully 98 percent of the students in the Nation who require special education are receiving some form of special instruction or service.

There are reasons for questioning the figures that are reported to the Office for Civil Rights. For one thing, official eligibility criteria can be manipulated so that the number of students who are deemed to be eligible for special education comes very close to the number for whom the school system can afford to provide special services. Moreover, there is very little information furnished to either the Office for Civil Rights or the Office of Special Education on what is actually being provided to special education students in the way of instruction or services in various states and localities. Nor do these agencies have any systematic program of direct observation or independent evaluation of the nature and quality of special education services around the country.

Another limitation of the official statistics is that they shed little light on the characteristics of the population of students who are receiving special education, apart from the sex and racial/ethnic composition of the population. Not present in the statistics are data about other aspects of family background, such as parent education and family income levels. Also lacking are measures of how well the students are doing in school, such as test scores, teacher ratings, or parent and child reports on how satisfied they are with the school situation and the student's academic progress.

Some of the information that is missing from the official statistics on special education has been collected on a limited basis in national surveys of the child and adolescent population. For example, in the 1960's, as part of the Health Examination Survey program, the National Center for Health

Statistics (NCHS) conducted two major studies of young people in the United States, one focusing on children aged 6-11 (NCHS, 1967), the other on adolescents aged 12-17 (NCHS, 1969). Both surveys involved interviews with parents, direct physical examination and psychological testing of the young people themselves, and reports on school performance and behavior from the youngsters' teachers. As part of the school questionnaires, teachers were asked to indicate whether they would recommend the child for special educational resources, such as remedial reading instruction or instruction for the mentally retarded, and whether the child was actually receiving these resources (NCHS, 1972, 1974).

Similar questions were put to the teachers of a later cohort of U.S. children as part of the National Survey of Children. This survey program, initiated by the Foundation for Child Development and later co-sponsored by the National Institute of Mental Health, studied a national probability sample of 7-11 year olds in 1976-77, and again in 1981, when the children were 12-16 years of age. Procedures used in these studies included interviews with parents, interviews with the children themselves, and questionnaires completed by the childrens' teachers (see Technical Appendix for description of survey; see also Furstenberg, Nord, Peterson, & Zill, 1983).

Trends In The Need For And Use Of Special Educational Resources

The use of parallel questions and comparable survey methods in the Health Examination Surveys and the National Survey of Children makes it possible to examine changes over the

span of more than a decade in the proportions of children who were thought to be handicapped or in need of special instruction, as well as changes in the proportions who were actually receiving special resources. In some instances, the comparisons over time are limited by changes in educational terminology. For example, the term "specific learning disabilities" did not appear in the school questionnaires used in the Health Examination Surveys. Comparisons are also constrained by the size of the sample in the National Survey of Children, which was not large enough to provide more than a few cases in the smaller handicapped categories. Despite these limitations, a number of illuminating comparisons between the surveys can be made.

When teacher responses in the Health Examination Survey of youths, conducted in 1966-70, are compared with teacher responses in the second wave of the National Survey of Children, conducted in 1981, several notable changes in the use of special educational resources are apparent (see Table 7). One is that the proportion of 12-16 year olds thought to be <u>in need of</u> remedial reading instruction nearly tripled between the two surveys, going from just under 7 percent to more than 19 percent. The proportion of teenaged students reported to be <u>receiving</u> remedial reading instruction increased nearly as much, going from 5 percent to nearly 14 percent. Dramatic increases also occurred in the proportion of students recommended for remedial instruction in other subjects (such as mathematics) and in the proportion said to be receiving such instruction. Not quite as dramatic, but still large, were the near doubling in

the proportion of students recommended for special resources for "slow learners and the learning disabled not classed as mentally retarded," and a similar increase in the proportion receiving this type of resource. However, the last two changes may be at least partly due to the fact, already noted, that learning disabilities were not explicitly mentioned in the earlier questionnaire.

Do the increases over time in the apparent need for and use of remedial instruction mean that there are now more children in the student population who are limited or behind in their intellectual development? Some analysts believe this to be the case. However, changes in educational policies and practices during the 1960's and 1970's could be responsible for the observed increases. For one thing, there was more automatic promotion of pupils from grade to grade over this period. This was so despite the recent movement to institute competency testing and promotional "gates" in many school systems. The use of "social promotion" means, almost by definition, that there will be a greater proportion of pupils in each of the upper grades who have not yet mastered the subject matter that used to be required for entrance into the grade and, hence, more need for remedial instruction.

The greater commitment that public schools throughout the nation have to trying to educate all students, regardless of background or aptitude, also implies a greater need for remedial teaching. In addition, there is more extensive use of standardized achievement testing by school systems across the country and a greater awareness and sensitivity on the part of

teachers and school administrators to where their pupils stand with respect to national norms. These factors, plus the availability of federal and state funds for compensatory and special education could well account for much of the apparent increase in the need for remedial instruction.

Underlining the validity of these arguments is the finding that the perceived need for special resources for gifted students increased nearly threefold between 1966-70 and 1981. The proportion of students participating in special programs for the gifted also went up, though more modestly, by 57 percent. Although many believe that there are more limited students now than in the past, few would contend that there has been a dramatic rise in the proportion of gifted students in the population. Noteworthy as well is the lack of significant change between the surveys in the proportions of children perceived to be mentally retarded or in need of speech therapy. These constancies are consistent with the notion that educational expectations and practices have changed more than the child population has.

Another area where a comparison between the surveys seems to show an increase in the need for resources is that of serious emotional disturbance. The proportion of adolescents identified by their teachers as being emotionally disturbed doubled between 1966-70 and 1981, going from just over one percent to nearly three percent. Given the lack of objective criteria for what constitutes a "serious" emotional disturbance, the meaning of the increase is debatable. It could be that there really are more disturbed youngsters in the population now

or that teachers are simply more sensitive to psychological disturbances than they were in the past. It is also possible that disturbed teenagers who were formerly treated in private and/or residential institutions are now more likely to be found in the public schools.

The latter interpretation is supported by the observation that, in the Health Examination Surveys conducted in the 1960's, the proportion of students identified as seriously emotionally disturbed declined significantly between the children's survey and the adolescent survey. (The proportion went from 3.4 percent in the former to 1.3 percent in the latter survey, see National Center for Health Statistics: 1972, Table 5, page 23; and 1974, Table 5, page 19.) There was less of a decline between the two waves of the National Survey of Children, conducted in 1976-77 and 1981 (see Table 8 later in this report). All of which suggests that, in the past, a substantial proportion of emotionally disturbed teenagers were taken out of regular public or private schools and placed in residential institutions (which action also served to remove them from household-based survey samples). This practice was apparently less common by the time of the later surveys. Other possible reasons for the observed increase in the proportion of teenaged students identified as seriously emotionally disturbed were presented earlier in this report (in the section on "Trends in the Number of Students Being Served").

The proportion of students actually receiving special help for emotional disturbances did not appear to change significantly from the Health Examination Survey to the National

Survey of Children. However, both the Office of Special Education child counts and the Office for Civil Rights survey data indicate that there has been real growth in the proportion getting help. Despite this growth, the number of students participating in special programs for the emotionally disturbed remains well below the number that teachers identify as needing such programs. One may question the ability of teachers to make valid psychiatric diagnoses, of course, but this does seem to be an area where the notion that virtually all handicapped children are now receiving special help for their problems in school is particularly suspect.

According to the child-based survey data, the ratio of students getting special resources to those perceived as needing help varies widely across the different categories of special education. In general, the survey comparisons do show improvement over time in the provision of special resources to children in need. However, the ratio of students getting help to those needing help is almost always well below the 98 percent figure that has been reported by the Office for Civil Rights.

Constancy and Change in the Identification of Individual Students As Handicapped

When we think of students who are educationally handicapped, we tend to think of them as having permanent disabilities that may be ameliorated, but not eliminated, by special training and assistance. Because of this common conception of educational handicap as relatively fixed and immutable, some educators have been wary of placing much

emphasis on the use of diagnostic labels such as "retarded" or "emotionally disturbed," especially in borderline cases. The concern is that the diagnostic labels will remain with the students throughout their educational careers, coloring teachers' perceptions, and perhaps lowering teachers' expectations of the students, for years to come.

But just how permanent are the diagnostic labels that teachers and school systems apply to pupils? Do these labels really tend to stick with the students for years, or is there considerable turnover from grade to grade in the groups of students that are thought to be handicapped or in need of special resources? Evidence from teacher ratings of the same children at two points in time suggests that there is a good deal more flux in the special education population than is commonly supposed. In the National Survey of Children, teacher ratings of the academic performance, school behavior, and special educational needs of individual students were obtained for a national sample of children when they were in elementary school (ages 7 to 11), and again when they were in junior high or high school (ages 12-16). For more than nine hundred of the 1,775 children who were selected for study in both waves of the national survey, teacher ratings of the need for special resources were obtained on both occasions.

When the overall proportions of students who were said to be in need of various educational resources were examined, these proportions were found to decline from the elementary to the secondary years (see Table 8). The declines were relatively slight, however, except in the case of speech therapy. The

marked decline with age in the proportion of students identified as in need of speech therapy was also found in the Health Examination Surveys of the 1960s (NCHS, 1972, 1974). The trend appears to be due to a developmental process whereby many children with juvenile speech problems grow out of their problems as they mature.

A different pattern was evident as far as the actual use of educational resources was concerned. For most of the sources examined, there was virtually no change from the elementary to the secondary years in the proportion of students receiving the resource. There were significant declines, however, in the proportions receiving speech therapy and remedial reading and, to a lesser extent, remedial instruction in subjects other than reading. The decline in the number of students receiving speech therapy is consistent with the reduction with age in the need for such therapy that was just mentioned. On the other hand, the declines in the receipt of remedial reading and other remedial instruction probably reflect the fact that such compensatory programs are less likely to be available in the secondary grades.

In contrast to the generally small declines in the numbers of children identified as needing particular educational resources, there was a substantial turnover in the identities of the individual children who were said to need help. For example, of the individual children who were perceived to require remedial reading instruction in the elementary-school survey, less than half -- 48 percent -- were still described as in need of such instruction 4 years later, in the secondary-

school survey. Likewise, of those children who were identified by their elementary teachers as being in need of special help because they were retarded, slow learners, or had learning disabilities, only 39 percent were identified by their teachers in junior high or high school as having the same need for resources. There was as much if not more turnover in the groups of students actually receiving specific forms of special instruction.

Agreement Between Teachers and Parents on the Need for Special Educational Resources

Another common conception about educational handicaps is that most are so apparent that teachers and parents would have no trouble agreeing that the child has a limitation and needs to be getting special help in school. In fact, data from the National Survey of Children indicate that many children who are identified by teachers as needing special resources have parents who seem unaware that their children have special problems in school. For example, of those adolescents in the 1981 survey who were identified by their teachers as needing special help because they were "slow learners" or had specific learning disabilities, only 57 percent were identified by their parents as having a limiting condition or getting special help in school (see Table 9).

Parent-teacher agreement was better in the case of mental retardation. More than 9 out of ten students identified by teachers as needing or using resources for the retarded were also identified by their parents as having a limiting condition

or getting special help in school. Parent/teacher agreement was considerably lower with respect to the need for or use of other types of special resources, such as those for the emotionally disturbed or speech impaired. Parents and teachers were generally more likely to agree when a given type of resource was actually being used by the student than when the student was simply identified as needing the resource. In the case of remedial reading, however, less than half of those students who were identified by teachers as receiving such instruction were also identified by their parents as getting special help in school.

The Education for All Handicapped Children Act calls for the parents of children with special educational needs to be fully informed about -- and extensively involved in -- the process of making educational plans and decisions concerning their offspring. The findings from the National Survey of Children indicate that this is not being done in many instances. However, the findings also suggest that keeping parents fully informed and involved may not be such a simple matter. Problems of logistics, communication, and understanding may hamper parental participation in some cases.

Parent Education, Family Income, and the Need for Special Education

Data from the National Survey of Children show that two aspects of a student's family background -- parent education and family income -- are both significantly related to the perceived need for and use of special educational resources. Students

from families with low education or income levels were three-to-five times more likely to be identified by their teachers as needing resources of a remedial character than were students from families with high education or income levels (see Table 10). For example, among students from families where the more educated parent had not graduated from high school, 38 percent were said to need remedial reading instruction. By contrast, among students with at least one parent who was a college graduate, only 7 percent were said to need remedial reading. Among students from families with incomes below $10,000, 8 percent were identified by their teachers as needing special help for serious emotional disturbances. Among students from families with incomes of $35,000 or more, only 1 percent of students were identified as emotionally disturbed. Similar although less pronounced differences were found with respect to the use of remedial resources.

An opposite pattern held true with respect to the perceived need for or use of advanced instruction or resources for the gifted. Among students from families where the parents had less than a high school education, less than 2 percent were identified by teachers as needing resources for the gifted. By contrast, among the children of college graduates, more than 12 percent were identified as gifted. Family income was similarly although less strongly related to the need for and use of advanced resources.

In the data from the National Survey of Children, parent education and family income were more strongly associated with the need for and use of special resources than was race. This

was true for both remedial and advanced resources. For the most part, the higher proportions of black students who were recommended for remedial resources, and the lower proportions who were recommended for advanced resources, were consistent with the lower education and income levels of the families from which many of the black students came. These findings underline the need for taking socioeconomic factors into account when making assessments of possible racial or ethnic bias in the assignment of students to special education programs.

The Academic Performance, Social Adjustment, and Educational Aspirations of Handicapped Students

One test of how well the special education programs being provided to handicapped students are working comes in the academic performance and social adjustment of the students themselves. How well are different groups of handicapped students doing in school? How well do they get along with their teachers and other children? How do they feel about going to school and how satisfied are they with their own school work? What aspirations and expectations do handicapped students and their parents have with respect to how far the students will go in school?

Some nationally representative data that begin to answer these kinds of outcome questions are available from the National Survey of Children. Unfortunately, the numbers of handicapped students in the survey were not sufficient to allow reliable outcome statistics to be determined for each of the different categories of handicaps. What was done instead was to divide

students into those who were identified by teachers as having a physical, emotional, or mental condition that limited their ability to do regular school work at grade level; those who were identified as having a condition that limited their ability to take part in sports, games, or other recreational activities with students of the same age; and those who were not identified as limited in school work or sports. Outcome measures were then examined for each of these broad groups.

Size and composition of the limitation groups. Teachers in the 1981 survey identified more than 15 percent of the students aged 12-16 as having a condition that limited either their school work or their recreational activities (see Table 11). Nearly 13 percent of the students were described as limited in school work and just over 6 percent, as limited in sports or games. Within each of these groups were the more than 3 percent of all students who were described as limited in both school work and sports. (Unfortunately, the number in this combined limitation group was too small to examine their outcomes separately.)

Some familiar differences emerged when the relative sizes of the different limitation proportions were determined for males and females, blacks and whites, and students from different educational and economic backgrounds. Boys were somewhat more likely than girls and black students were somewhat more likely than non-minority students to be identified as limited in either school work or sports. Students from families with low education or income levels were much more likely to be identified as limited than were students from families with

higher education or income levels. The socioeconomic differences were larger with regard to limitations in school work than with regard to limitations in sports or recreational activities.

Teacher ratings of academic performance. According to their teachers, students who were identified as limited in school work ranked significantly lower in class standing and were more likely to be making unsatisfactory progress than students who were not identified as limited (see Table 12). For example, 55 percent of the limited students were ranked "below the middle" or "near the bottom of the class," and nearly 64 percent were rated as "could have done better" last year. The comparable proportions for students not identified as limited were 22 percent and 42 percent, respectively. Students identified as limited in sports activities also received significantly more negative academic performance ratings than the not-limited group, but not as negative as those limited in school work.

Teacher ratings of social adjustment and school behavior. According to their teachers, students who were identified as limited in school work were less likely than non-limited students to get along well with other students and teachers and more likely to pose disciplinary problems in school (see Table 13). For example, 36 percent of the limited students were described as getting along poorly with fellow students, 27 percent as getting along poorly with teachers, and 15 percent as frequently requiring disciplinary action. By contrast, among the non-limited students, 6 percent were said to get along

poorly with fellow students, 5 percent to get along poorly with teachers, and 3 percent to require frequent disciplinary action.

The group that was limited in sports activities again occupied an intermediate position between those who were limited in school work and those who were not limited. However, with respect to getting along with fellow students, the students limited in sports were depicted in essentially as negative terms as the students limited in school work. Forty percent of the students limited in sports or games were described as getting along poorly with other students.

Student ratings of feelings about school and school work. When students themselves were interviewed, nearly three quarters of the students identified as limited in school work said they liked or loved going to school (this compared with 82 percent of the non-limited students who said the same). However, twice as many of the limited students -- 13 percent to 6 percent -- said they hated school (see Table 14). Moreover, 60 percent of the limited students (versus 39 percent of the non-limited) said they were interested in their school work "just some of the time" or "hardly ever." Seventy-one percent of the limited students (versus 51 percent of the non-limited) said they felt ashamed when they made mistakes in class. And only 25 percent of the limited students (as opposed to 45 percent of the non-limited) said they felt "very satisfied" with their school work.

The students limited in sports activities expressed feeling about school closer to those of the non-limited students

than to those of the educationally handicapped group. Seventy-eight percent of those limited in sports said they liked or loved going to school and 41 percent were "very satisfied" with their school work. On the other hand, 51 percent were interested in their school work "just some of the time" or less often, and 63 percent felt ashamed of mistakes in class.

Educational expectations of parents and students. Despite the problems they were having in school, a majority of educationally limited students -- 56 percent -- had parents who expected them to get some college training (see Table 15). Half of these students themselves expected to get some college. Only 2 percent said they wanted to quit school as soon as possible.

However, only 28 percent of the educationally handicapped students expected to graduate college, which was substantially lower than the comparable proportions for athletically handicapped students (48 percent of whom expected to finish college) or for non-limited students (61 percent of whom expected to complete college). The parents of students limited in school work also had generally lower educational expectations than the parents of other students, whereas parents of students limited in sports and games had intermediate expectations.

Summary of outcome measures. All in all, the outcome data from the National Survey of Children indicate that limited adolescents, especially those with educational handicaps, are significantly worse off than non-limited adolescents in terms of their academic progress and their overall adjustment to the school and classroom situation.

Adolescents handicapped with respect to sports or games do not seem to fare as badly as those limited in school work. However, they too show significant decrements in performance and adjustment when compared with non-handicapped students. (The data suggest that it is primarily those limited in both school work and sports who show the decrements.) Thus, although much progress has been made in providing special educational resources to pupils in need, much remains to be learned as to how to make school a more productive and positive experience for all handicapped students.

FOOTNOTES

(1) The validity of the breakdown of the student count by type of handicapping condition may be called into question for at least one state, i.e., Massachusetts, and for at least one age group, i.e., preschoolers, in a number of states. In the case of Massachusetts, the State follows a noncategorical approach to the delivery of special education resources to all students and produces student counts by condition only because the federal government requires such counts. In a number of states, noncategorical or cross-categorical approaches are used for the delivery of services to handicapped children of preschool age. The breakdowns reported in these instances are probably only estimates of what the actual counts would be. However, the magnitude of these problems is such that, if more accurate figures were available, they probably would not alter the trends described in this report in any major way. (See also Footnote 2.)

(2) By law, states receiving federal funds under P.L. 94-142 are required to supply the federal government with an unduplicated count of the number of students receiving special education services. There have been inconsistencies, however, both from state to state and from year to year within a given state, in the ways in which students with more than one handicapping condition have been categorized. For details, see notes to child

count tables in the Appendixes of the Annual Report to Congress on the Implementation of Public Law 94-142 produced by the Office of Special Education and Rehabilitative Services (e.g., OSERS, 1983, pp. 174-175). Some states have also reported combined counts for some of the smaller handicap categories. These irregularities make relatively little difference as far as national trends in the larger handicap categories are concerned, but they do complicate the interpretation of changes in the multihandicapped category and in some of the smaller condition categories, such as "other health impaired."

(3) There have been a number of problems over the years with the teacher counts broken down by type of condition taught. The Office of Special Education and Rehabilitative Services (OSERS) requires that teacher counts be provided in the form of "full-time equivalents," so that teachers who teach students with more than one type of condition may be counted in an unduplicated manner. However, when unduplicated breakdowns have been supplied, they have typically been produced by formulas based on child counts, rather than by observations of how teachers actually spend their time. Moreover, a few states in at least some years have not provided unduplicated breakdowns of their total teacher counts or have not provided any breakdown at all. In a number of states, teachers of the preschool handicapped have usually not been subdivided by type of

condition taught. Thus, the total number of special education teachers reported by OSERS typically exceeds the sum of the numbers in the condition categories. These and other data problems complicate the interpretation of the teacher trends, although they probably do not invalidate the major patterns of change described in this report. For further details, see the notes to the teacher count tables in the Appendixes of the Annual Report to Congress on the Implementation of Public Law 94-142 (e.g., OSERS, 1983, pp. 171-172).

(4) The interpretation of this trend is complicated by the fact that states have varied in how they count teachers of the speech impaired: some include speech pathologists in the count of special education teachers; some count speech pathologists under "school staff other than special education teachers;" and some even include speech teachers as well as speech pathologists under the non-teacher rubric. (For details, see OSERS, 1983, pp. 171-172.)

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Technical Appendix

The National Survey of Children

The first wave of the National Survey of Children was designed by Nicholas Zill, sponsored by the Foundation for Child Development, and carried out by the Institute for Survey Research at Temple University in 1976. Its purpose was to study the well-being of children across a broad range of indicators. The study population was defined as children living in households in the 48 contiguous states who were aged 7-11. The sample was designed to yield approximately 500 interviews with black children and 1,500 with nonblack children. Within each racial group, several stages of selection were employed to ensure that each eligible child had an equal probability of being selected.

As a result of these procedures, 2,193 households containing one or more eligible children were located; from these households full interviews were completed with 2,279 children in 1,747 households, or 80 percent.

Interviews were conducted with the eligible child and the parent who would be most capable of providing information about the child. This was usually the mother. If a selected family had three or more eligible children, two were selected at random to be interviewed. A follow-up study of schools attended by the children was conducted in the spring of 1977. School information, obtained from the child's main teacher, was gathered for 73 percent of the sample, or 1,682 children.

Weights were developed to adjust for the oversampling of black children, and to correct for minor differentials between census and sample figures for age, sex, and race of child, and residential location.

In 1981, funding was obtained from the National Institute of Mental Health and the Foundation for Child Development to follow up the families in order to examine the consequences of marital disruption for the development and well-being of the children. This follow-up study was directed by Nicholas Zill and James L. Peterson at Child Trends, Inc., and by Frank F. Furstenberg, Jr., at the University of Pennsylvania. Limited resources precluded reinterviewing the entire sample. Because of the focus on marital disruption, the reinterviews included all children in families that had experienced a marital disruption by the time of the earlier survey, all children whose parents had previously reported a high-conflict marriage, and a randomly selected subsample of children from stable marriages with low or medium conflict, which were eventually weighted back to their true proportion in the original sample. In all, children from 1,350 families were selected to be in the subsample. From this subsample full interviews were completed with 1,377 children in 1,047 or 78 percent of the families.

As before, interviews were conducted with a parent and one or two children in the household. In more than 97 percent of the cases the parent interviewed was the same individual who had participated in the first wave of the study. School

information was again collected by mailed questionnaires, which were completed for 1,137 or 83 percent of the children who were reinterviewed.

New weights were developed to take account of the differential rates of selection and completion across groups in the subsample, and to adjust for other minor variations by income, ethnicity, and area of residence. Except for minor differences due to emigration and immigration, these data when weighted constitute a national sample of children aged 12 to 16 in 1981.

One important difference in the design of the two surveys, necessitated by budget restrictions, was that most of the follow-up interviews were carried out by telephone. In order to be able to test their reliability, a random subsample of personal interviews were carried out. Later statistical analysis revealed no detectable differences between telephone and personal interviews.

In 1976, data were collected from both parent and teacher of each child regarding whether the child had a health condition which limited school work or sports activities and, if so, what the nature of the condition was. Both parents and teachers were asked about their perceptions of the child's need for or use of special educational resources due to specific handicapping conditions. Also included were questions about need for or use of advanced instruction or classes for the gifted. In addition both the parent and child were asked about educational aspirations and expectations, and the parent and teacher were asked about school performance, and school

adjustment. In 1981 these same questions were replicated, except that the full range of questions about need for and use of special educational resources were included in the teacher questionnaire only. Parents were asked a simpler question -- whether the child was receiving any special classes for remedial work or for advanced work. Analyses have shown that these simpler questions relate as well as the more detailed ones when parent responses are compared with those of teachers.

Since teacher questionnaires were not completed for all children in the study, non-response may introduce some bias into the school-based results. Most likely to be missed were urban blacks, because of the lower rate of cooperation from large city school systems. Nonetheless, non-response to the school questionnaire was reasonably evenly distributed over ethnic, regional, and other demographic groupings, so that biases, if any, should be small.

The differences presented in the narrative are of such a magnitude that they can not be attributed to sampling error alone. Generalized standard errors are available from Child Trends, Inc.

Further information about the National Survey of Children may be obtained from Child Trends, Inc., 1990 M Street, N.W., Washington, DC 20036.

Table 1
Number of Children 3 to 21 Years Old Served Annually in Educational Programs for the Handicapped, Percentage Distribution, and Percent of Total Public School Enrollment, by Type of Handicap: United States, School Years 1976-77 to 1983-84

Type of Handicap	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
			Number Served, in Thousands				
All conditions	3,692	3,751	3,889	4,005	4,142	4,198	4,255
Learning disabled	796	964	1,130	1,276	1,462	1,622	1,741
Speech impaired	1,302	1,223	1,214	1,186	1,168	1,135	1,131
Mentally retarded	959	933	901	869	829	786	757
Seriously emotionally disturbed	283	288	300	329	346	339	352
Hard of hearing and deaf	87	85	85	80	79	75	73
Orthopedically handicapped	87	87	70	66	58	58	57
Other health impaired	141	135	105	106	98	79	50
Visually handicapped	38	35	32	31	31	29	28
Multihandicapped	*	*	50	60	68	71	63
Deaf-blind	*	*	2	2	3	2	2
			Percentage Distribution of Children Served				
All conditions	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Learning disabled	21.5	25.7	29.1	31.9	35.3	38.6	40.9
Speech impaired	35.3	32.6	31.2	29.6	28.2	27.0	26.6
Mentally retarded	26.0	24.9	23.2	21.7	20.0	18.7	17.8
Seriously emotionally disturbed	7.6	7.7	7.7	8.2	8.4	8.1	8.3
Hard of hearing and deaf	2.4	2.3	2.2	2.0	1.9	1.8	1.7
Orthopedically handicapped	2.3	2.3	1.8	1.6	1.4	1.4	1.3
Other health impaired	3.8	3.6	2.7	2.6	2.4	1.9	1.2
Visually handicapped	1.0	.9	.8	.8	.8	.7	.7
Multihandicapped	-	-	1.3	1.5	1.6	1.7	1.5
Deaf-blind	-	-	.1	.1	.1	.1	.1
			As Percent of Total Enrollment				
All conditions	8.33	8.61	9.14	9.62	10.11	10.47	10.73
Learning disabled	1.80	2.21	2.66	3.06	3.57	4.05	4.39
Speech impaired	2.94	2.81	2.85	2.85	2.85	2.83	2.85
Mentally retarded	2.16	2.14	2.12	2.09	2.02	1.96	1.91
Seriously emotionally disturbed	.64	.66	.71	.79	.85	.85	.89
Hard of hearing and deaf	.20	.20	.20	.19	.19	.19	.18
Orthopedically handicapped	.20	.20	.16	.16	.14	.14	.14
Other health impaired	.32	.31	.25	.25	.24	.20	.13
Visually handicapped	.09	.08	.08	.08	.08	.07	.07
Multihandicapped	-	-	.12	.14	.17	.18	.16
Deaf-blind	-	-	.01	.01	.01	.01	.01

*Not available.

-Not applicable.

NOTE: Counts are based on reports from the 50 States and District of Columbia only (i.e., figures from U.S. territories are not included). Percentages of total enrollment are based on the total annual enrollment of U.S. public schools, preprimary through 12th grade. Details may not add to totals because of rounding.

SOURCE: Calculated from U.S. Department of Education, Office of Special Education and Rehabilitative Services, Fifth Annual Report to Congress on the Implementation of Public Law 94-142, 1984 and unpublished tabulations (September 1984).

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Table 2
Trends in Number of Special Education Teachers Employed Annually in Public Elementary/Secondary Schools, and Pupil-Teacher Ratios, by Type of Handicapped Persons Taught: United States, School Years 1976-77 to 1981-82

Type of Handicapped Persons Taught	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	Percent Change 1976-77 to 1981-82
All conditions:							
Number of teachers employed	178,768	193,571	202,000	219,835	231,403	233,516	30.6
Ratio of pupils per teacher	21:1	19:1	19:1	18:1	18:1	18:1	
Learning disabled:							
Number of teachers employed	43,906	53,743	62,379	74,812	84,756	83,468	90.1
Ratio of pupils per teacher	18:1	18:1	18:1	17:1	17:1	19:1	
Speech impaired:							
Number of teachers employed	18,355	19,736	19,038	24,073	24,379	20,443	11.4
Ratio of pupils per teacher	71:1	62:1	64:1	49:1	48:1	56:1	
Mentally retarded:							
Number of teachers employed	71,008	75,061	70,389	68,138	67,238	63,267	-10.9
Ratio of pupils per teacher	14:1	12:1	13:1	13:1	12:1	12:1	
Seriously emotionally disturbed:							
Number of teachers employed	21,666	20,660	23,185	26,610	27,338	25,015	15.5
Ratio of pupils per teacher	13:1	14:1	13:1	12:1	13:1	14:1	
Hard of hearing and deaf:							
Number of teachers employed	8,665	8,587	9,131	8,387	8,234	7,953	-8.2
Ratio of pupils per teacher	10:1	10:1	9:1	10:1	10:1	9:1	
Orthopedically handicapped:							
Number of teachers employed	5,331	4,707	5,673	4,710	4,419	4,642	-12.9
Ratio of pupils per teacher	16:1	19:1	12:1	14:1	13:1	12:1	
Other health impaired:							
Number of teachers employed	4,948	5,108	4,904	5,121	3,168	3,514	-29.0
Ratio of pupils per teacher	29:1	27:1	21:1	21:1	31:1	23:1	
Visually handicapped:							
Number of teachers employed	3,451	3,506	4,210	3,353	3,470	3,027	-12.3
Ratio of pupils per teacher	11:1	10:1	8:1	9:1	9:1	10:1	
Multihandicapped:							
Number of teachers employed	*	*	*	3,962	5,428	5,400	-
Ratio of pupils per teacher	-	-	-	15:1	13:1	13:1	-
Deaf-blind:							
Number of teachers employed	*	*	*	671	369	392	-
Ratio of pupils per teacher	-	-	-	4:1	8:1	6:1	-
Non-categorical:							
Number of teachers employed	*	*	*	*	*	15,838	-

*Not available.

-Not applicable.

NOTE: Teacher counts are based on reports from 49 States and the District of Columbia only (New Mexico does not report on special education personnel and figures from U.S. territories are not included). Totals for all conditions exceed sums for individual conditions because some special education teachers have not been categorized in some State reports. Pupil-teacher ratios are based on the counts shown in Table 1.

SOURCE: Calculated from U.S. Department of Education, Office of Special Education and Rehabilitative Services, Fifth Annual Report to Congress on the Implementation of Public Law 94-142, Appendix 3, Table A, 1983, and unpublished tabulations.

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Table 3

3a. Proportion of Handicapped Children 3-21 Years Old Receiving Special Educational Services in Regular Classes, in Special Classes, in Special Schools, and in Other Environments, For All Conditions By School Year, and By Condition for Latest School Year: United States, 1976-77 to 1981-82

Percent of Handicapped Children Served in Each Environment (All Conditions Combined)

TYPE OF EDUCATIONAL ENVIRONMENT	SCHOOL YEAR 1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Regular class	67%	68%	68%	68%	68%	68%
Special class in regular school	25	25	26	25	25	25
Separate school facility	5	5	4	5	6	6
Other educational environment	3	2	2	2	1	1
	100%	100%	100%	100%	100%	100%

3b. Percent of Handicapped Children Served In Each Environment, By Condition, 1981-82 School Year

TYPE OF HANDICAP	TYPE OF EDUCATIONAL ENVIRONMENT: Regular Class	Special Class	Special School	Other Environment	All Environments
All Conditions	68%	25%	6%	1%	100%
Learning Disabled	80	19	1	-	100
Speech Impaired	94	4	1	1	100
Mentally Retarded	30	57	12	1	100
Emotionally Disturbed	42	40	16	2	100
Hard of Hearing and Deaf	39	37	23	1	100
Orthopedically Impaired	33	33	20	14	100
Other Health Impaired	33	45	5	17	100
Visually Handicapped	59	18	21	2	100
Multihandicapped	22	45	27	6	100
Deaf-Blind	11	42	44	3	100

SOURCE: U.S. Department of Education, Office of Special Education and Rehabilitative Services, unpublished tabulations.

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Table 4

Number and Proportion of Public Elementary and Secondary Schools with Architectural Features to Accommodate the Needs of Physically Handicapped Students: United States, Fall 1978 and Fall 1980

	SCHOOL YEAR	
	1978	1980
Total number of schools in survey universe	80,134	77,544
Schools with...		
Accessible building entrances		
Number	48,101	56,511
Percent of total schools	60.0%	72.9%
Accessible toilet stalls		
Number	21,327	42,124
Percent of total schools	26.6%	54.3%
Accessible science labs		
Number	10,611	18,266
Percent of total schools	13.2%	23.6%
Percent of all schools with science labs	51.0%	(*)
Total number of classrooms in survey universe	1,304,201	1,935,391
Accessible classrooms		
Number	767,334	1,255,839
Percent of total classrooms	58.8%	64.9%

*Not available for 1980.

SOURCE: U.S. Department of Education, Office for Civil Rights. National summaries of data from the 1978 and 1980 Civil Rights Surveys of Elementary and Secondary Schools.

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Table 5

Annual Total of Federal Grants to States and Territories Under Public Law 94-142 and Amount Granted per Handicapped Child, in Current and Constant Dollars: United States and Territories, 1977 to 1983

Total federal grants to states and territories under P.L. 94-142: The Education for All Handicapped Children Act	CALENDAR YEAR*							
	1977	1978	1979	1980	1981	1982	1983	1984
Current dollars (in millions)	$ 251.8	$ 566.0	$ 804.0	$ 874.5	$ 874.5	$ 931.0	$1017.9	$1068.9 (est.)
Constant (1983) dollars (in millions)	415.2	867.0	1106.9	1060.5	960.9	964.8	1017.9	-
Amount per handicapped child								
Current dollars	$ 72	$159	$217	$230	$222	$233	$251	$261 (est.)
Constant (1983) dollars	119	244	299	279	244	241	251	-

*The bulk of the PL94-142 funds are paid to the States and Territories in July of each year, for use in the following school year.

SOURCE: Calculated from unpublished tabulations provided by U.S. Department of Education, Office for Special Education and Rehabilitative Services.

Table 6

Proportion of Elementary and Secondary School Students Participating In Selected Special Education Programs, By Sex and Ethnic Group of Student: United States Public Schools, Fall 1978 and Fall 1980

TYPE OF SPECIAL EDUCATION PROGRAM	Percent Participating			Percent Participating	
Specific Learning Disabilities	1978	1980	Speech Impairments	1978	1980
All Students	2.3%	3.2%	All Students	2.0%	2.3%
Males	3.2%	4.4%	Males	2.4%	2.8%
Females	1.3	1.8	Females	1.5	1.7
Whites*	2.3%	3.2%	Whites	2.0%	2.4%
Blacks*	2.2	3.1	Blacks	1.9	2.1
Hispanics	2.6	3.2	Hispanics	1.8	1.8
Asians	1.3	1.4	Asians	1.8	1.8
American Indians	3.5	4.1	American Indians	1.8	1.9
Educable Mentally Retarded			Seriously Emotionally Disturbed		
All Students	1.4%	1.4%	All Students	0.3%	0.5%
Males	1.7%	1.6%	Males	0.5%	0.7%
Females	1.2	1.1	Females	0.2	0.2
Whites	1.1%	1.1%	Whites	0.3%	0.4%
Blacks	3.4	3.4	Blacks	0.5	0.7
Hispanics	1.0	0.8	Hispanics	0.3	0.4
Asians	0.4	0.[illegible]	Asians	0.1	0.1
American Indians	1.7	1.7	American Indians	0.3	0.5
Trainable Mentally Retarded			Gifted/Talented		
All Students	0.2%	0.2%	All Students	1.9%	2.6%
Males	0.3%	0.3%	Males	1.8%	2.4%
Females	0.2	0.2	Females	2.1	2.7
Whites	0.2%	0.2%	Whites	2.1%	2.9%
Blacks	0.4	0.4	Blacks	1.3	1.5
Hispanics	0.2	0.2	Hispanics	1.5	1.5
Asians	0.2	0.2	Asians	4.6	5.3
American Indians	0.2	0.3	American Indians	0.8	1.1

*Non-Hispanic

SOURCE: U.S. Department of Education, Office for Civil Rights. National summaries of data from the 1978 and 1980 Civil Rights Surveys of Elementary and Secondary Schools.

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Table 7

Change Between 1966-70 and 1981 in Proportion of U.S. Students Aged 12-16 Identified By Teachers As Needing and Using Special Educational Resources, By Type of Resource

TYPE OF RESOURCE	Percentage of Students Identified As Needing and Using Special Resources in: 1966-70	1981	Percent Change
Remedial Reading			
Resource needed	6.9%	19.5%	+183
Resource used	5.1	13.7	+169
Other Remedial Instruction			
Resource needed	2.7%	15.2%	+463
Resource used	1.5	9.7	+547
Slow Learners, Learning Disabilities*			
Resource needed	5.5%	10.4%	+ 89
Resource used	4.0	7.4	+ 85
Mentally Retarded			
Resource needed	1.4%	1.3%	ns
Resource used	1.2	1.2	ns
Speech Therapy			
Resource needed	1.2%	1.4%	ns
Resource used	0.8	1.1	ns
Emotionally Disturbed			
Resource needed	1.3%	2.7%	+108
Resource used	0.7	1.0	ns
Gifted			
Resource needed	2.6%	7.2%	+177
Resource used	2.3	3.6	+ 57
Unweighted Sample Size	N=5,397	1,135	

* Question in 1966-70 survey used term "slow learners" only.

ns Change between surveys not statistically significant.

SOURCE: National Center for Health Statistics, data from Cycle III of the Health Examination Survey; and Child Trends, Inc., data from 1981 National Survey of Children.

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Table 8

Stability and Change Over Time In Teacher Identification of Students As Needing and Using Special Educational Resources, By Type of Resource, U.S. Children Aged 7-11 at Time 1 (1977) and 12-16 at Time 2 (1981)

TYPE OF RESOURCE	Percentage of Students in Sample Identified As Needing and Using Special Resources: In Elementary School (at ages 7-11)	In Junior High or High School (at ages 12-16)	On Both Occasions	Continuation Ratio*
Remedial Reading				
Resource needed	23.3%	19.5%	10.9%	.48
Resource used	16.2	13.7	5.4	.36
Other Remedial Instruction				
Resource needed	16.6%	15.2%	5.1%	.32
Resource used	10.4	9.7	1.9	.20
Mentally Retarded, Slow Learner, or Learning Disability				
Resource needed	13.0%	11.4%	4.8%	.39
Resource used	8.5	8.4	2.7	.34
Speech Therapy				
Resource needed	5.2%	1.4%	0.7%	.12
Resource used	3.7	1.1	0.6	.16
Emotionally Disturbed				
Resource needed	4.0%	2.7%	-**	-**
Resource used	1.0	1.0	-**	-**
Gifted				
Resource needed	9.6%	7.2%	2.4%	.24
Resource used	3.4	3.6	0.6	.17
Advanced Instruction				
Resource needed	11.7%	10.6%	1.8%	.16
Resource used	6.9	6.7	0.5	.07
Unweighted Number of Observations	N=1,156	1,135	937	

* Proportion of those students identified as needing or using resource at Time 1 who were identified as needing or using same resource at Time 2. Based on those cases for whom school data were available for both occasions. Unweighted number of observations in denominator ranges from n=38 to n=220.

** Insufficient number of observations on both occasions to calculate reliable statistics.

SOURCE: Child Trends, Inc., data from the 1976-77 and 1981 National Survey of Children.

Table 9

Parent-Teacher Agreement on Identification of Specific Students As Needing and Using Special Educational Resources, By Type of Resource, U.S. Adolescents Aged 12-16, 1981

Teacher Identification of Type of Resource Needed and Used	Proportion of Students Identified By Teacher Who Are Also Identified By Parent*
For Mentally Retarded	
Resource needed	92%
Resource used	91
For Slow Learners or Learning Disabilities	
Resource needed	57%
Resource used	70
For Emotionally Disturbed	
Resource needed	63%
Resource used	51
Speech Therapy	
Resource needed	53%
Resource used	61
Remedial Reading	
Resource needed	43%
Resource used	47
Other Remedial Instruction	
Resource needed	47%
Resource used	59

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* Parent identified student as either getting special help in school or as having a limiting condition.

SOURCE: Child Trends, Inc., data from the 1981 National Survey of Children.

Table 10

Teacher Identification of Students Needing and Using Special Educational Resources By Type of Resource, Race of Student, Parent Education Level, and Family Income, U.S. Children Aged 12-16, 1981

Percentage of Students Identified As Needing and Using Resource

TYPE OF RESOURCE	ALL STUDENTS	RACE		PARENT EDUCATION				FAMILY INCOME			
		W*	B	Less than high school	High school graduate	Some college	College graduate	Less than $10 thous.	$10 to 20 thous.	$20 to 35 thous.	$35 thous. or more
Remedial Reading											
Resource needed	19.5%	16.0%	38.6%	38.0%	20.9%	13.2%	7.1%	35.1%	20.1%	12.3%	8.1%
Resource used	13.7	11.1	29.3	25.7	15.4	7.7	6.1	24.6	16.4	7.0	8.1
Other Remedial Instruction											
Resource needed	15.2%	13.0%	25.0%	28.5%	16.0%	8.7%	9.1%	24.5%	15.5%	11.2%	8.9%
Resource used	9.7	7.9	19.3	16.4	11.2	3.6	7.8	14.6	9.2	7.7	6.7
Slow Learners, Learning Disabilities											
Resource needed	10.4%	9.3%	13.8%	20.9%	11.4%	5.6%	4.0%	16.7%	9.4%	7.4%	5.7%
Resource used	7.4	6.6	8.9	14.6	7.7	3.6	3.8	10.0	8.0	5.3	4.2
Speech Therapy											
Resource needed	1.4%	1.1%	4.1%	3.0%	1.8%	1.1%	0.1%	2.0%	1.8%	1.0%	1.8%
Resource used	1.1	1.0	2.2	1.7	1.8	0.7	0.1	1.0	1.4	0.9	1.8
Emotionally Disturbed											
Resource needed	2.7%	2.3%	3.3%	6.7%	2.5%	1.2%	1.2%	7.8%	2.5%	1.0%	1.0%
Resource used	1.0	0.5	1.7	2.8	0.6	0.9	-	3.6	0.6	0.3	-
Gifted											
Resource needed	7.2%	7.4%	3.5%	1.5%	6.3%	8.7%	12.3%	7.8%	5.1%	7.1%	12.6%
Resource used	3.6	3.7	1.4	-	3.5	2.9	8.0	3.3	2.0	4.7	4.0
Advanced Instruction											
Resource needed	10.6%	11.0%	7.2%	4.0%	8.1%	13.4%	17.9%	10.6%	7.0%	12.2%	14.0%
Resource used	6.7	7.2	3.3	1.9	4.7	6.6	14.8	6.4	3.4	9.2	7.5

* Non-Hispanic whites only.

SOURCE: Child Trends, Inc., data from the 1981 National Survey of Children.

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Table 11

Teacher Identification of Students With Limiting Conditions, By Type of Limitation, Sex and Ethnic Group of Student, Parent Education Level, and Family Income, U.S. Children Aged 12-16, 1981

	Proportion of Students Said To Have A Physical, Emotional, or Mental Condition That:			
	Limits Ability To Do Regular School Work At Grade Level	Limits Ability To Take Part in Sports or Games	Limits Both School Work and Sports Activities	Limits Either School Work or Sports Activities
All Students (N=1158)	12.7%	6.2%	3.4%	15.5%
Sex of Student				
Male (601)	13.5%	6.9%	3.2%	17.2%
Female (557)	11.8	5.4	3.6	13.6
Ethnic Group of Student				
Black (152)	14.6%	7.6%	4.0%	18.2%
Non-Minority (947)	11.5	5.8	3.2	14.1
Parent Education Level				
Less than high school (209)	23.6%	8.7%	7.0%	25.3%
High school graduate (411)	15.4	7.0	3.9	18.5
Some college (294)	8.6	4.3	1.9	11.0
College graduate or more (238)	3.9	4.1	1.3	6.7
Family Income				
Less than $10,000 (228)	21.9%	7.9%	5.9%	23.9%
$10,000 - 19,999 (300)	12.9	6.3	3.8	15.4
$20,000 - 34,999 (471)	9.2	5.1	2.1	12.2
$35,000 or more (132)	8.0	5.1	2.2	10.9

Source: Child Trends, Inc., data from the 1981 National Survey of Children.

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Table 12

Teacher Ratings of Academic Standing and Performance of Handicapped and Non-Handicapped Students, By Type of Limitation (As Identified By Teacher): U.S. Adolescents Aged 12-16, 1981

PERCENT DISTRIBUTIONS

Teacher rating of students overall standing in class during previous school year:	All Students (n=1,122)	Students Limited In School Work (n=146)*	Students Limited In Sports Activities (n=76)*	Students Not Identified As Limited (n=945)
One of the best students in the class	16.8%	4.6%	11.9%	18.7%
Above the middle	26.0	13.4	18.2	28.3
In the middle	30.1	26.9	30.4	30.7
Below the middle or near the bottom of the class	27.1	55.1	39.5	22.3
	100.0%	100.0%	100.0%	100.0%
Teacher rating of student's performance in class during previous school year:				
Did really well	23.4%	3.9%	13.4%	26.4%
Did about as well as he/she could	31.9	32.5	35.3	31.8
Could have done better	44.7	63.6	51.2	41.8
	100.0%	100.0%	100.0%	100.0%

*Includes 45 students described as limited in both school work and sports activities.
Note: Details may not add to totals because of rounding.
SOURCE: Child Trends, Inc., data from 1981 National Survey of Children.

Table 13

Teacher Ratings of Social Adjustment and Need for Discipline of Handicapped and Non-Handicapped Students, By Type of Limitation (As Identified By Teacher): U.S. Adolescents Aged 12-16, 1981

	PERCENT DISTRIBUTIONS			
	All Students	Students Limited In School Work*	Students Limited In Sports Activities*	Students Not Identified As Limited
Teacher rating of how well student got along with other students in class during previous school year:				
Much better (than other students)	14.3%	1.3%	3.7%	16.7%
Better	32.3	17.7	32.1	34.1
About the same	42.7	45.2	24.4	42.8
Worse or much worse	10.7	35.8	39.8	6.4
	100.0%	100.0%	100.0%	100.0%
Teacher rating of how well student got along with teachers during previous school year:				
Much better (than other students)	23.8%	3.8%	9.4%	27.2%
Better	31.1	24.7	41.2	31.4
About the same	37.2	44.8	34.6	36.3
Worse or much worse	7.9	26.6	14.8	5.1
	100.0%	99.9%	100.0%	100.0%
Teacher rating of how frequently any disciplinary action was required for students during the previous school year:				
Frequently	4.7%	14.6%	10.2%	3.2%
Occasionally	37.0	52.2	46.8	34.6
Never	58.3	33.2	43.0	62.2
	100.0%	100.0%	100.0%	100.0%

*Includes students described as limited in both school work and sports activities (see Table 12).

SOURCE: Child Trends, Inc., data from 1981 National Survey of Children.

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Table 14

Feelings About School Expressed By Handicapped and Non-Handicapped Students, By Type of Limitation (As Identified By Teacher): U.S. Adolescents Aged 12-16, 1981

	PERCENT DISTRIBUTIONS			
Feelings about going to school:	All Students	Students Limited In School Work*	Students Limited In Sports Activities*	Students Not Identified As Limited
Love it	11.2%	7.6%	6.6%	11.9%
Like it	70.0	66.0	71.0	70.5
Dislike it	11.5	12.1	9.5	11.4
Hate it	6.9	13.6	11.4	5.9
Not sure	0.4	0.7	1.5	0.3
	100.0%	100.0%	100.0%	100.0%
Interested in school work:				
Most of the time	58.2%	39.6%	48.6%	60.9%
Just some of the time	37.0	50.0	42.9	35.5
Hardly ever	4.9	10.4	8.5	3.6
	100.1%	100.0%	100.0%	100.0%
Ashamed of mistakes in class				
Yes	53.6%	71.3%	63.1%	51.1%
No	46.4	28.7	36.9	48.9
	100.0%	100.0%	100.0%	100.0%
Satisfaction with own school work				
Very satisfied	42.7%	24.9%	41.4%	45.0%
Somewhat satisfied	43.7	52.0	48.3	42.6
Not too satisfied	13.6	23.1	10.3	12.3
	100.0%	100.0%	100.0%	99.9%

*Includes students described as limited in both school work and sports activities (see Table 12).

SOURCE: Child Trends, Inc., data from 1981 National Survey of Children.

Table 15

Educational Aspirations and Expectations of Parents of Handicapped and Non-Handicapped Students, and of Students Themselves, By Type of Limitation (As Identified By Teacher)
U.S. Adolescents Aged 12-16, 1981

PARENT

Level of Aspiration	All Students (n=1,122)		Students Limited In School Work (n=146)*		Students Limited In Sports (N=76)*		Students Not Identified As Limited (n=885)	
	Parent Wants Child To	Parent Thinks Child Will	Parent Wants Child To	Parent Thinks Child Will	Parent Wants Child To	Parent Thinks Child Will	Parent Wants Child To	Parent Thinks Child Will
Graduate college or more	61%	45%	47%	28%	57%	40%	63%	47%
Get some college	21	25	20	28	20	24	21	25
Graduate high school	17	26	29	35	18	23	15	25
Leave high school before graduation	-	2	1	7	3	5	-	1
Other, or don't know	1	2	2	2	2	8	1	2
	100%	100%	100%	100%	100%	100%	100%	100%

CHILD

Level of Aspiration	Student Would Like To	Student Thinks He/She Will	Student Would Like To	Student Thinks He/She Will	Student Would Like To	Student Thinks He/She Will	Student Would Like To	Student Thinks He/She Will
Finish college or more	59%	57%	31%	28%	53%	48%	63%	61%
Get some college	20	20	20	22	24	24	20	20
Finish high school	20	22	47	48	23	24	16	18
Quit school as soon as possible	1	1	2	2	-	2	1	1
Other, or don't know	-	-	-	1	-	2	-	-
	100%	100%	100%	100%	100%	100%	100%	100%

*Includes 45 students described as limited in both school work and sports activities.
Note: Details may not add to totals because of rounding.
Source: Child Trends, Inc., data from 1981 National Survey of Children.

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